





# Kentucky Youth Tobacco Survey 2006



## **Acknowledgements**

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A special thanks to:

Tobacco Cessation and Prevention Specialists throughout the state for working diligently to collect this data and for the assistance of the Kentucky Department of Education

Funding for this project was provided by the Centers for Disease Control and Prevention, Office of Smoking and Health

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#### INTRODUCTION

The Kentucky Tobacco Prevention and Cessation Program (KTPC), located in the Department for Public Health, has received funding from the Centers for Disease Control and Prevention since 1993 in order to establish a comprehensive tobacco control program to reduce disease, disability, and death related to tobacco use. In order to achieve this, KTPC addresses the following four goals:

- Preventing the initiation of tobacco use among young people
- Promoting quitting among young people and adults
- Eliminating nonsmokers' exposure to secondhand smoke
- Identifying and eliminating the disparities related to tobacco use and its effects among different population groups

Along with federal funds, the KTPC receives state funds through the Master Settlement Agreement. With these resources, KTPC supports 56 local health departments in building local capacities to prevent and eliminate harm from tobacco use. The successful administration of the Kentucky Youth Tobacco Survey (KYTS) by local health departments reveals information useful in monitoring the work toward achieving each of the four goals listed above. Evaluation of the activities conducted to prevent and control tobacco use in Kentucky will result in a greater knowledge of how to direct resources in the future.

The 2006 KYTS was conducted from February to May 2006 by local health department tobacco coordinators and the Kentucky Department for Public Health. Technical assistance was provided by the CDC Office on Smoking and Health. A total of 3,016 high school students and 3,745 middle school students completed usable questionnaires. Students were surveyed using a questionnaire containing 67 questions based on the Youth Tobacco Survey instrument originally developed in 1997 by the Florida Department of Health and the CDC.

The KYTS is designed to gather information on young people concerning:

- Prevalence of tobacco use, including cigarettes, smokeless tobacco, cigars, and bidis
- Cessation of tobacco use
- Secondhand smoke exposure
- Access to tobacco products
- Use of tobacco in schools
- Tobacco-related attitudes
- Influence of peers and family members to use tobacco products

The results from the KYTS also benefit monitoring of Healthy Kentuckians 2010, which is a health initiative reflecting Kentucky's commitment to the national prevention project "Healthy People 2010." The KYTS provides data for youth objectives in chapter 3 of Healthy Kentuckians 2010, such as objectives to reduce the prevalence of cigarette smoking among middle and high school students, reduce the proportion of high school students who have smoked a whole cigarette before age 13, and increase the proportion of high school students who have never smoked.

The following report contains results from the 2006 high school and middle school KYTS, as well as comparison results from previous years (the KYTS is conducted in even years only). High school data is compared with 2004 data and middle school data is compared with 2002 data, since weighted data was not obtained in 2004 for middle schools. Statistical analyses of the differences between survey years were calculated with SAS/SUDAAN software. Differences are considered statistically significant where p-values are less than 0.05. These differences are noted throughout the report with a blue asterisk (\*). Where data from one year to the next have a statistically significant difference, it can be said that the difference did not happen by chance. The report is divided into different topics regarding tobacco use. Definitions of each topic area can be found on page 43 of this report.

## **Executive Summary**

The 2006 KYTS survey results revealed statistically significant decreases in both middle and high school students who reported having ever tried smoking cigarettes, even one or two puffs. Lifetime use of any type of tobacco also decreased significantly among middle school students. Decreases also were seen among both middle and high school students regarding current and lifetime use of cigarettes, smokeless tobacco, cigars, bidis, and overall tobacco; however, these decreases were not found to be significantly different the previous survey. Regarding exposure to secondhand smoke in rooms and cars, significant decreases were noted among middle school students. Survey results of social influences impacting tobacco use reveal a significant increase among high school current smokers who have one or more friends that smoke.

#### Cigarettes

Current smokers:

- High school decreased from 28 percent in 2004 to 25 percent in 2006.
- Middle school decreased from 15 percent in 2002 to 12 percent in 2006.

Lifetime smokers:

- High school decreased significantly from 63 percent in 2004 to 57 percent in 2006. \*
- Middle school decreased significantly from 44 percent in 2002 to 36 percent in 2006. \*

#### **Smokeless Tobacco**

Current use:

- High school decreased from 15 percent in 2004 to 13 percent in 2006.
- Middle school decreased from 11 percent in 2002 to 8 percent in 2006.
- Twenty-three percent of males used in 2006, compared to 3 percent of females.

Lifetime use:

- From 2004 to 2006, high school remained the same (31 percent).
- Middle school decreased from 22 percent in 2002 to 18 percent in 2006.

#### Cigars

Current smokers:

- From 2004 to 2006, high school students remained about the same (15 percent).
- Middle school decreased from 8 in 2002 to 7 percent in 2006.

Lifetime smokers:

- High school decreased from 41 percent in 2004 to 39 in 2006.
- Middle school decreased from 24 percent in 2002 to 21 percent in 2006.

#### Bidis

Current smokers:

- High school students decreased from 4 percent in 2004 to 3 percent in 2006.
- Middle school decreased from 5 percent in 2002 to 3 percent in 2006.

Lifetime smokers:

- High school decreased from 7 percent in 2004 to 6 percent in 2006.
- Middle school decreased from 7 percent in 2002 to 6 percent in 2006.

#### **Any Type of Tobacco**

Current use:

- High school decreased from 38 percent in 2004 to 34 percent in 2006.
- Middle school decreased from 24 percent in 2002 to 19 percent in 2006.

Lifetime use:

- High school decreased from 69 percent in 2004 to 65 percent in 2006.
- Middle school decreased significantly from 52 percent in 2002 to 44 percent in 2006. \*

#### Quit Attempts— current smokers who attempted to quit smoking at least once in the past 12 months

- High school remained about the same from 2004 to 2006 (60 percent).
- Middle school increased from 62 percent in 2002 to 66 percent in 2006.

Current use is

defined as having

Lifetime use is defined as having ever tried smoking or using a tobacco product, even one or two puffs.

smoked or used a tobacco product on one or more of the past 30 days.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## **Executive Summary— continued**

#### Access— where current smokers were more likely to get their cigarettes

- In 2004 and 2006, high school smokers more often gave money to an older person to purchase cigarettes than purchased them in a store themselves, borrowing or bumming them from someone, or getting them from an older person.
- In 2006, middle school smokers were also more likely to get cigarettes by giving money to an older person to purchase them. However, in 2002, middle school current smokers were more likely to borrow or bum cigarettes from others.

#### Secondhand Smoke— in a room where someone was smoking within the past week

- Total high school remained the same from 2004 to 2006 (78 percent).
  - Current smokers decreased from 93 percent in 2004 to 92 percent in 2006.
  - Never smokers increased from 66 percent in 2004 to 67 percent in 2006.
- Total middle school decreased significantly from 63 percent in 2002 to 55 percent in 2006.
  - Current smokers decreased from 90 percent in 2002 to 86 percent in 2006.
  - Never smokers decreased significantly from 63 percent in 2002 to 55 percent in 2006.

#### Secondhand Smoke— in a car where someone was smoking within the past week

- Total high school decreased from 62 percent in 2004 to 61 percent in 2006.
  - Current smokers remained unchanged at 85 percent from 2004 to 2006.
  - Never smokers increased from 42 percent in 2004 to 44 percent in 2006.
- Total middle school decreased significantly from 60 percent in 2002 to 42 percent in 2006.
  - Current smokers decreased from 86 percent in 2002 to 80 percent in 2006.
  - Never smokers decreased significantly from 50 percent in 2002 to 42 percent in 2006. ∗

#### **Perceptions and Attitudes Toward Tobacco Use**

Think young people who smoke have more friends:

- High school decreased slightly from 21 percent in 2004 to 20 percent in 2006.
- Middle school increased from 18 percent in 2002 to 20 percent in 2006.

Think smoking makes young people look cool:

- High school has not changed from 2004 to 2006 (11 percent).
- Middle school decreased from 12 percent in 2002 to 11 percent in 2006.

Consider smoke from someone else's cigarette to be harmful:

- High school remained about the same from 2004 to 2006 (92 percent).
  - Current smokers increased from 88 percent in 2004 to 89 percent in 2006.
  - Never smokers increased from 94 percent in 2004 to 96 percent in 2006.
- Middle school increased from 88 percent in 2002 to 89 percent in 2006.
  - Current smokers remained the same from 2002 to 2006 (82 percent).
  - Never smokers increased slightly from 91 percent in 2002 to 92 percent in 2006.

Believe people could get addicted to using tobacco just like they can get addicted to heroin or cocaine:

- High school increased from 87 percent in 2004 to 89 percent in 2006.
  - Current smokers increased from 83 percent in 2004 to 85 percent in 2006.
  - Never smokers increased from 89 percent in 2004 to 93 percent in 2006.
- Middle school increased from 88 percent in 2002 to 89 percent in 2006.
  - Current smokers increased from 82 percent in 2002 to 84 percent in 2006.
  - Never smokers increased slightly from 90 percent in 2002 to 91 percent in 2006.

Think it is safe to smoke for a year or two, as long as you quit after that:

- High school decreased from 14 percent in 2004 to 13 percent in 2006.
  - Current smokers decreased from 28 percent in 2004 to 24 percent in 2006.
  - Never smokers decreased from 5 percent in 2004 to 4 percent in 2006.
- Middle school decreased from 13 percent in 2002 to 12 percent in 2006.
  - Current smokers decreased from 35 percent in 2002 to 31 percent in 2006.
  - Never smokers increased from 5 percent in 2002 to 7 percent in 2006.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## **Executive Summary— continued**

Think people risk harming themselves if they smoke between one and five cigarettes a day:

- High school increased from 89 percent in 2004 to 91 percent in 2006.
  - Current smokers decreased from 86 percent in 2004 to 84 percent in 2006.
  - Never smokers increased from 93 percent in 2004 to 94 percent in 2006.
- Middle school increased from 87 percent in 2002 to 88 percent in 2006.
  - Current smokers increased from 79 percent in 2002 to 82 percent in 2006.
  - Never smokers increased from 90 percent in 2002 to 91 percent in 2006.

#### Social Influences Impacting Tobacco Use

Lives with someone who currently smokes:

- High school increased from 54 percent in 2004 to 55 percent in 2006.
  - Current smokers remained the same from 2004 to 2006 (66 percent).
  - Never smokers decreased from 40 percent in 2004 to 44 percent in 2006.
- Middle school remained the same from 2002 to 2006 (54 percent).
  - Current smokers increased from 76 percent in 2002 to 78 percent in 2006.
  - Never smokers decreased from 45 percent in 2002 to 44 percent in 2006.

Lives with someone who currently uses smokeless tobacco:

- High school decreased from 23 percent in 2004 to 22 percent in 2006.
  - Current smokeless tobacco users remained the same from 2004 to 2006 (66 percent).
  - Never smokeless tobacco users remained the same from 2004 to 2006 (17 percent).
- Middle school decreased from 23 percent in 2002 to 22 percent in 2006.
  - Current smokeless tobacco users increased from 51 percent in 2002 to 55 percent in 2006.
  - Never smokeless tobacco users remained the same from 2002 to 2006 (17 percent).

Have one or more friends that smoke:

- High school decreased from 61 percent in 2004 to 59 percent in 2006.
  - Current smokers increased significantly from 89 percent in 2004 to 92 percent in 2006.
  - Never smokers decreased from 41 percent in 2004 to 38 percent in 2006.
- Middle school decreased from 42 percent in 2002 to 37 percent in 2006.
  - Current smokers increased from 86 percent in 2002 to 88 percent in 2006.
  - Never smokers decreased from 22 percent in 2002 to 21 percent in 2006.

Have one or more friends that currently use smokeless tobacco:

- High school increased from 44 percent in 2004 to 45 percent in 2006.
  - Current smokeless tobacco users increased from 85 percent in 2004 to 86 percent in 2006.
  - Never smokeless tobacco users increased from 31 percent in 2004 to 33 percent in 2006.
- Middle school decreased from 32 percent in 2002 to 31 percent in 2006.
  - Current smokeless tobacco users decreased from 79 percent in 2002 to 76 percent in 2006.
  - Never smokeless tobacco users remained unchanged from 2002 to 2006 (23 percent).

#### **Tobacco Dependence**

Lifetime smokers who smoked their first cigarette before age 11

- High school decreased from 19 percent in 2004 to 18 percent in 2006.
- Middle school decreased from 31 percent in 2002 to 28 percent in 2006.

Lifetime smokers who have smoked 100 or more cigarettes:

- High school decreased from 35 percent in 2004 to 32 percent in 2006.
- Middle school decreased from 17 percent in 2002 to 16 percent in 2006.

Current smokers who feel like they need a cigarette every day:

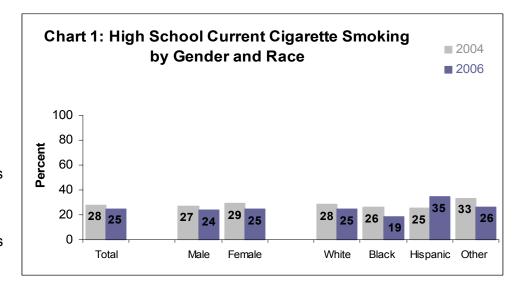
- High school decreased from 48 percent in 2004 to 44 percent in 2006.
- Middle school increased from 33 percent in 2002 to 35 percent in 2006.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

# A. Cigarettes: Current Use 1. High School

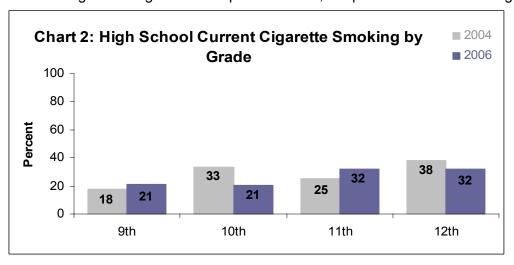
In 2006, 25 percent of high school students were current smokers, compared to 28 percent in 2004.

Twenty-four percent of males and 25 percent of females were current smokers in 2006, which is a decrease from 2002 for both genders.



From 2004 to 2006, current smoking among whites in high school decreased (from 28 percent to 25 percent), as did current smoking among African Americans in high school (from 26 percent to 19 percent). Thirty-five percent of Hispanic high school students were current smokers in 2006, compared to 25 percent in 2004. In 2006, 26 percent of high school students in other race/ethnic groups including American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander were current smokers, compared to 33 percent in 2004.

In 2006, 11th grade students were more likely to be current cigarette smokers than students in other high school grades. Compared to 2004, the prevalence of current cigarette smokers

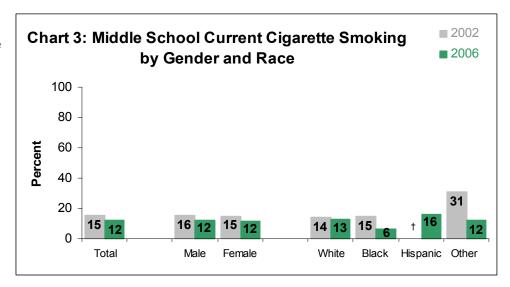


in high school in 2006 was lower in 10th and 12th grade, but higher in 9th and 11th grade.

## A. Cigarettes: Current Use 2. Middle School

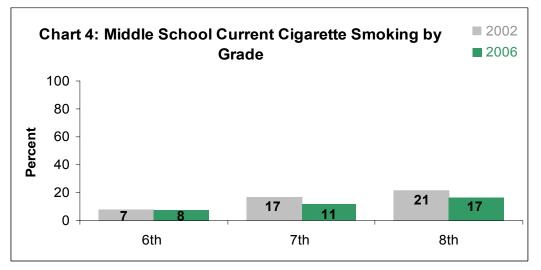
In 2002, 15 percent of middle school students were current smokers, compared to 12 percent in 2006.

Twelve percent of males and females were current smokers in 2006, which is a decrease from 2002 for both genders.



From 2002 to 2006, current smoking among whites in middle school decreased (from 14 percent to 13 percent) and current smoking among African Americans in middle school also decreased over this time period (from 15 percent to 6 percent). Sixteen percent of Hispanic middle school students were current smokers in 2006. Twelve percent of middle school students in the Other racial/ethnic group were current smokers in 2006, compared to 31 percent in 2002.

In 2006, 8th grade students were more likely to be current cigarette smokers than students in other middle school grades. Compared to 2002, the prevalence of current cigarette smokers



in middle school in 2006 was lower in all middle school grades except for 6th.

<sup>9</sup> 

2006,

compared

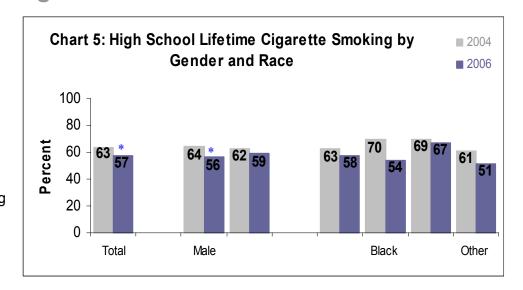
to 2002.

#### I. PREVALENCE

# B. Cigarettes: Lifetime Use1. High School

In 2006, lifetime smoking among high school youth was 57 percent, a statistically significant decline from 63 percent in 2004.

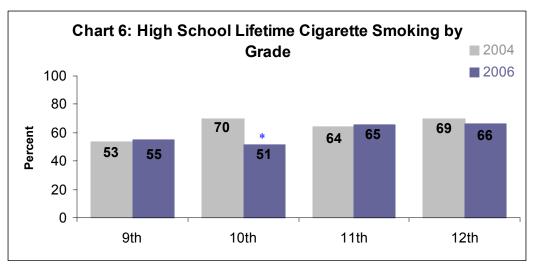
Lifetime smoking among males was 56 percent in 2006, a statistically significant decrease from



2004 (64 percent). Lifetime cigarette smoking among females decreased from 2004 to 2006 (from 62 percent to 59 percent).

Lifetime cigarette smoking among white, African American, Hispanic, and the Other racial/ethnic category decreased from 2004 to 2006. High school students in the Other racial/ethnic group were less likely to be lifetime smokers in 2006 than whites, African Americans, or Hispanics.

From 2004 to 2006, lifetime cigarette smoking decreased significantly among 10th grade students (from 70 percent to 51 percent). Lifetime cigarette smoking was lower in grades 10 and 12 in

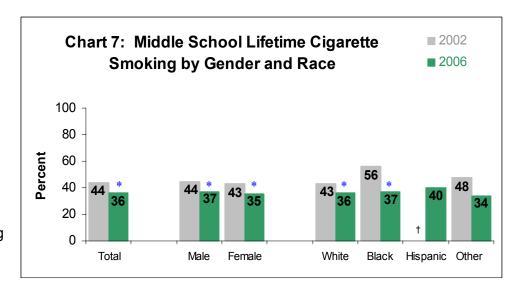


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## B. Cigarettes: Lifetime Use 2. Middle School

From 2002 to 2006, lifetime cigarette smoking among middle school students decreased from 44 percent to 36 percent (statistically significant).

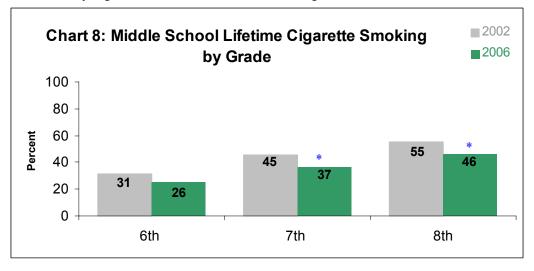
Lifetime smoking decreased among both males and females from



2002 to 2006 (both statistically significant).

Lifetime smoking decreased significantly among white middle school students from 2002 to 2006 (from 43 percent to 36 percent). From 2002 to 2006, lifetime smoking among African American students decreased from 56 percent to 37 percent (statistically significant). Lifetime smoking among Hispanics in 2006 was 40 percent. From 2002 to 2006, lifetime smoking among students in the Other racial/ethnic group decreased from 48 percent to 34 percent.

From 2002 to 2006, lifetime cigarette smoking decreased among all middle school grades. Statistically significant decreases occurred in grades 7 and 8 from 2002 to 2006. In 2006, 6th



grade students were less likely to be lifetime smokers than students in other grades.

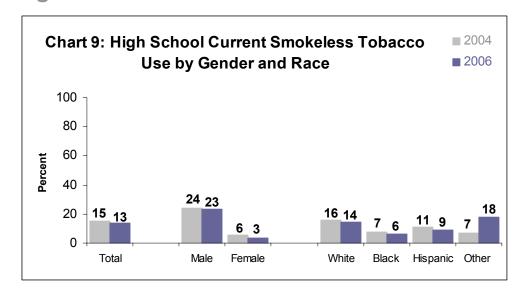
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

# C. Smokeless Tobacco: Current Use1. High School

Current smokeless tobacco use decreased among high school students from 2004 to 2006 (from 15 percent to 13 percent).

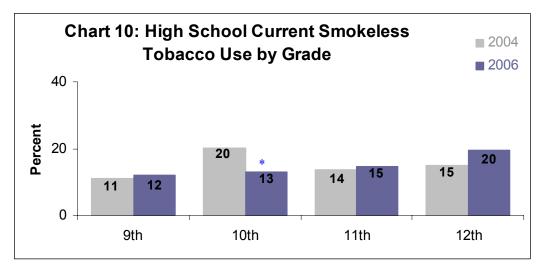
Over a two-year time period, current smokeless tobacco use decreased



slightly among male high school students from 24 percent to 23 percent. Current smokeless tobacco use among females decreased from 6 percent to 3 percent.

Current smokeless tobacco use decreased in all racial/ethnic groups from 2004 to 2006, except in the Other racial/ethnic group, which includes American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander. In 2006, African Americans were least likely to be current smokeless tobacco users compared to other racial/ethnic groups in high school.

From 2004 to 2006, current smokeless tobacco use decreased significantly among 10th grade students (from 20 percent to 13 percent). In 2006, current smokeless tobacco use was higher in all grades except 10th, compared to 2004.

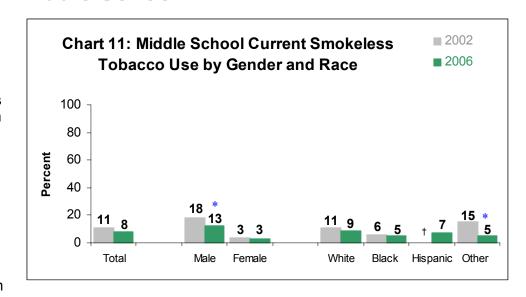


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## C. Smokeless Tobacco: Current Use 2. Middle School

Current smokeless tobacco use among middle school students decreased from 11 percent to 8 percent from 2002 to 2006.

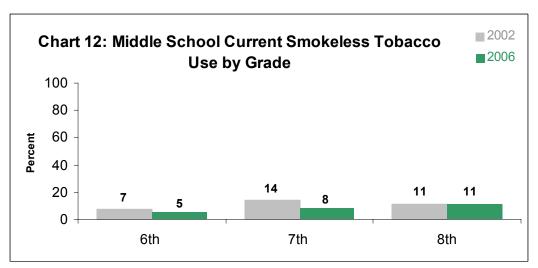
Over this fouryear period, current smokeless tobacco use among males in middle school



decreased from 18 percent to 13 percent, which is a statistically significant change. Female current smokeless tobacco use did not change from 2002 to 2006.

Current smokeless tobacco use among white middle school students decreased from 11 percent to 9 percent from 2002 to 2006. African American middle school students were less likely to be current smokeless tobacco users in 2006, compared to 2002. In 2006, 7 percent of Hispanic middle school students were current smokeless tobacco users. From 2002 to 2006, current smokeless tobacco use among middle school students in the Other racial/ethnic group decreased from 15 percent to 5 percent (a statistically significant change).

From 2002 to 2006, current smokeless tobacco use decreased among all middle school



grades.
Students in 6th grade in 2006 were less likely to be current smokeless tobacco users than students in other grades.

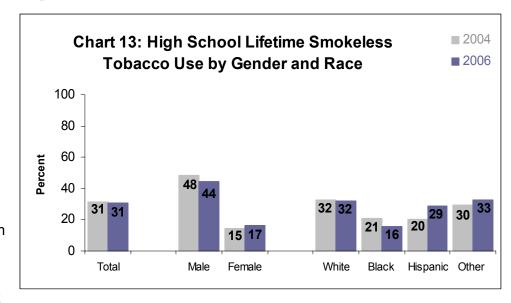
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

# D. Smokeless Tobacco: Lifetime Use1. High School

From 2004 to 2006, lifetime smokeless tobacco use did not change among high school students overall.

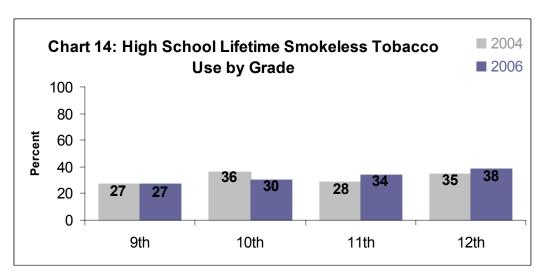
Lifetime smokeless tobacco use among male high school students decreased from 2004 to 2006 (from 48 percent



to 44 percent). Female lifetime smokeless tobacco use increased from 2004 to 2006 (from 15 percent to 17 percent).

From 2004 to 2006, lifetime smokeless tobacco use among white high school students remained the same (32 percent). In 2006, African Americans were less likely to be lifetime smokeless tobacco users than in 2004 (16 percent in 2006, compared to 21 percent in 2004). Hispanics were more likely to be lifetime smokeless tobacco users in 2006 than in 2002, as were high school students in the Other racial/ethnic group.

From 2004 to 2006, lifetime smokeless tobacco use increased in all grades, except 10th grade where it decreased from 36 percent to 30 percent. High school students in 12th grade

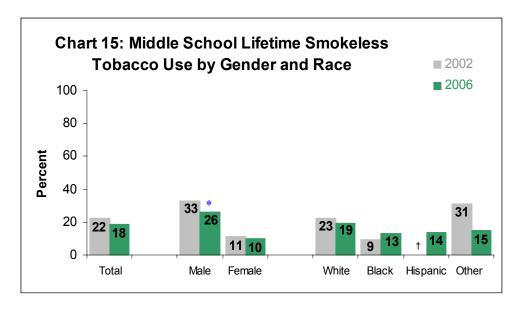


in 2006
were more likely to be lifetime smokeless tobacco users, compared to all other grades.

## D. Smokeless Tobacco: Lifetime Use 2. Middle School

Lifetime smokeless tobacco use among middle school students decreased from 2002 to 2006 from 22 percent to 18 percent.

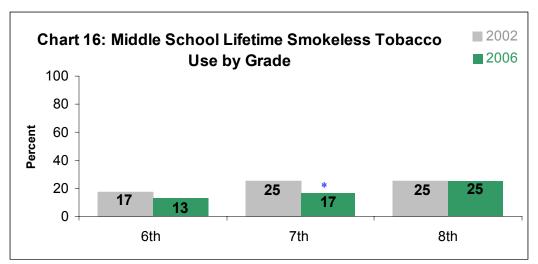
From 2002 to 2006, male middle school students were less likely to be lifetime smokeless



tobacco users than in 2002 (26 percent in 2006, compared to 33 percent in 2002), which is a statistically significant decrease. Female lifetime smokeless tobacco use decreased from 11 percent to 10 percent from 2002 to 2006.

From 2002 to 2006, lifetime smokeless tobacco use decreased among white middle school students and those in the Other racial/ethnic group. Lifetime smokeless tobacco use increased among African American middle school students over the same time period. In 2006, 14 percent of Hispanic middle school students were lifetime smokeless tobacco users.

From 2002 to 2006, lifetime smokeless tobacco use decreased significantly among 7th grade students (from 25 percent to 17 percent). Over this same four-year period, 6th grade lifetime



smokeless tobacco use also decreased, while 8th grade use remained the same.

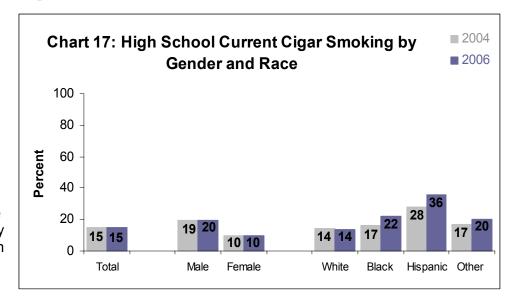
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

# E. Cigars: Current Use 1. High School

From 2004 to 2006, current cigar use among high school students remained the same (15 percent).

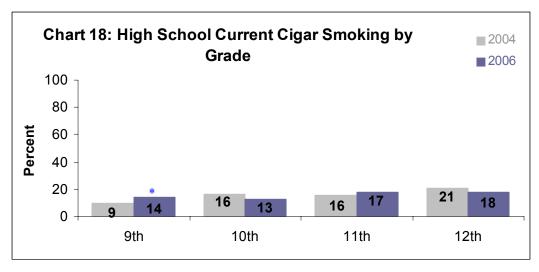
Over the twoyear period, current cigar use increased slightly among male high school students. Female current cigar use



remained the same from 2004 to 2006.

Current cigar use among white high school students stayed at 14 percent from 2004 to 2006. Twenty-two percent of African American high school students were current cigar smokers in 2006, compared to 17 percent in 2004. From 2004 to 2006, Hispanic current cigar smoking increased from 28 percent to 36 percent. Current cigar use among high school students in the Other racial/ethnic category increased from 17 percent in 2004 to 20 percent in 2006.

From 2004 to 2006, current cigar smoking increased significantly among 9th grade students, from 9 percent to 14 percent. Current cigar use decreased among 10th and 12th grade students, but increased among 11th graders.

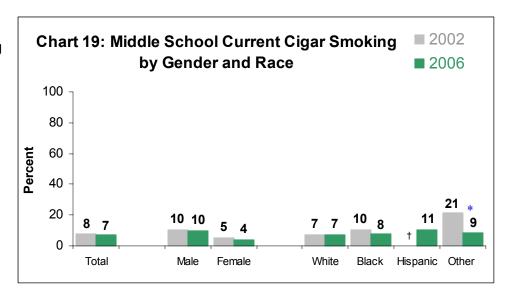


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

# E. Cigars: Current Use 2. Middle School

Current cigar use decreased among middle school students from 2002 to 2006 (from 8 percent to 7 percent).

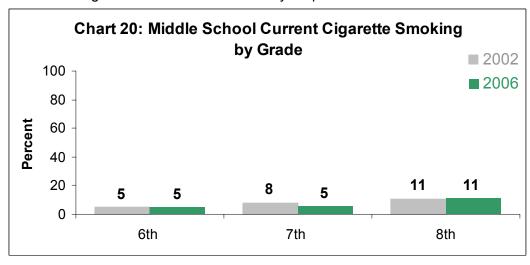
From 2002 to 2006, current cigar smoking did not change among middle school males (10 percent); however, female use decreased



from 5 percent to 4 percent.

Current cigar smoking stayed the same among white middle school students from 2002 to 2006 (7 percent), but decreased among African American middle school students (from 10 percent to 8 percent). Eleven percent of Hispanic middle school students were current cigar smokers in 2006. From 2002 to 2006, current cigar use decreased significantly among middle school students in the Other racial/ethnic group (from 21 percent to 9 percent).

Current cigar use decreased in 7th grade from 2002 to 2006. It remained the same among 6th and 8th grade students over the four-year period.



<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

# F. Cigars: Lifetime Use 1. High School

From 2004 to 2006, lifetime cigar smoking decreased among high school students, from 41 percent to 39 percent.

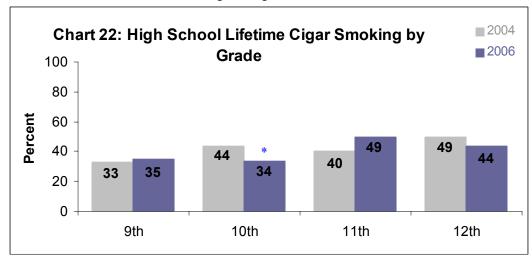
Lifetime cigar use among males decreased from 49 percent to 47 percent over the twoyear time period. Female high

**2004** Chart 21: High School Lifetime Cigar Smoking by **2006 Gender and Race** 100 80 Percent 60 40 40 38 40 41 33 31 20 0 Total Male Female White Black Hispanic Other

school students were less likely to be lifetime cigar smokers in 2006 than in 2004.

From 2004 to 2006, lifetime cigar use decreased among white, African American, and Hispanic high school students. However, high school students in the Other racial/ethnic group were more likely to be lifetime cigar users in 2006 than in 2004.

Lifetime cigar use decreased significantly from 2004 to 2006 among 10th grade students (from 44 percent to 34 percent). Lifetime cigar use increased among 9th and 11th grade students, and decreased among 12th grade students from 2004 to 2006.

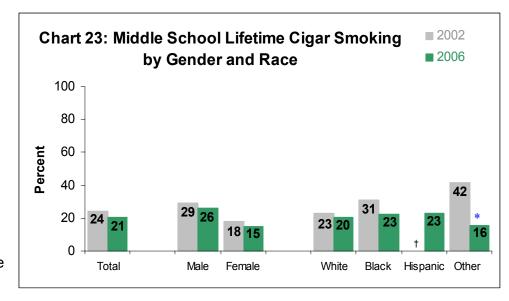


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

# F. Cigars: Lifetime Use 2. Middle School

From 2002 to 2006, lifetime cigar smoking decreased among middle school students (from 24 percent to 21 percent).

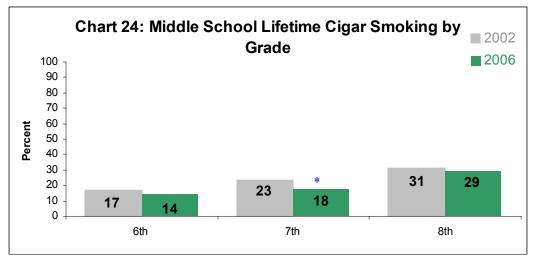
Lifetime cigar smoking decreased among male middle school students over the four-year period, from 29 percent



to 26 percent. Female middle school students were less likely to be lifetime cigar users in 2006 than in 2002 (15 percent compared to 18 percent).

White, African American, and students falling in the other racial/ethnic group were all less likely to be lifetime cigar users in 2006 than in 2002. Lifetime cigar smoking among students in the Other racial/ethnic group decreased significantly over four years (from 42 percent to 16 percent). In 2006, 23 percent of Hispanic middle school students were lifetime cigar users.

Lifetime cigar use among 6th, 7th and 8th grade students decreased from 2002 to 2006. A statistically significant decrease occurred among 7th grade students over the four-year time period.

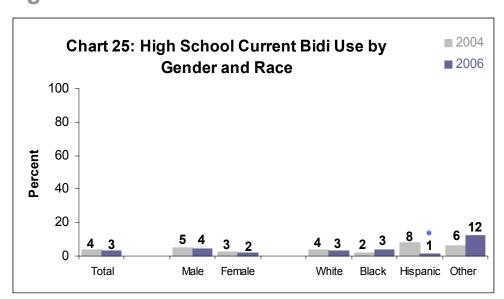


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>†</sup> Insufficient data (sample size is less than 50)

# G. Bidis: Current Use 1. High School

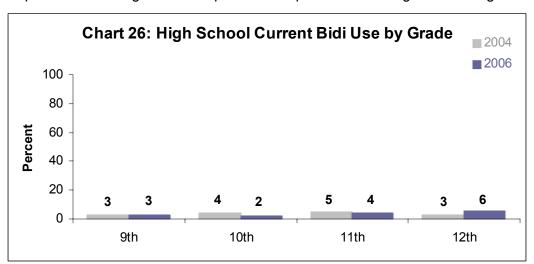
Current bidi smokina decreased from 2004 to 2006 among high school students. Over the two year time period. current bidi use decreased among both males and females, from 5 percent to 4 percent among males and from 3 percent to 2



percent among females.

Current bidi smoking decreased among white high school students from 2004 to 2006, from 4 percent to 3 percent. However, current bidi use increased among African Americans from 2004 to 2006, from 2 percent to 3 percent. Hispanic high school current bidi use decreased significantly over the two years, from 8 percent to 1 percent. Current bidi smoking was more likely in among high school students in the other racial/ethnic group in 2006 than in 2004 (12 percent, compared to 6 percent).

Current bidi use among 10th and 11th grade decreased from 2004 to 2006, from 4 percent to 2 percent for 10th grade and 5 percent to 4 percent for 11th grade. Ninth grade current bidi

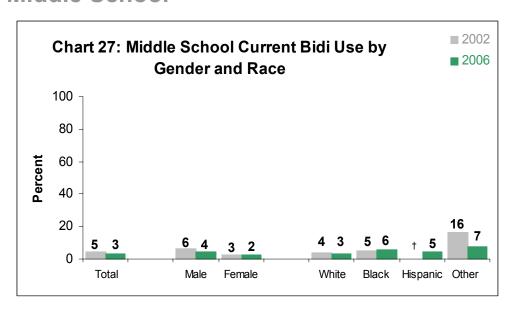


use did not change, while current bidi use increased among 12th grade students over the two-year time period.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## G. Bidis: Current Use 2. Middle School

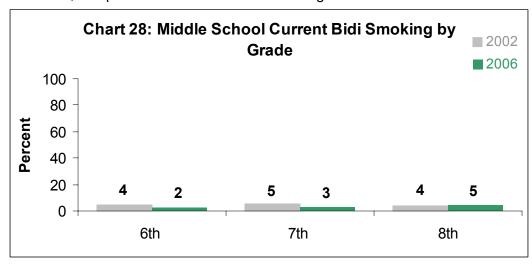
Current bidi use among middle school students decreased from 2002 to 2006. from 5 percent to 3 percent. Over the four-year period, current bidi use decreased among both males and females in middle school. from 6 percent to 4 percent for



males and 3 percent to 2 percent for females.

White middle school students were less likely to be current bidi smokers in 2006 than in 2002. African American middle school students were more likely to be current bidi users in 2006 than in 2002. Five percent of Hispanic middle school students were current bidi smokers in 2006. Seven percent of middle school students in the Other racial/ethnic group were current bidi smokers in 2006, compared to 16 percent in 2002.

From 2002 to 2006, current bidi use increased among 8th grade students, from 4 percent to 5 percent, while it decreased among 6th, from 4 percent to 2 percent and 7th grade students, from 5 percent to 3 percent. In 2006, 6th grade students were less likely to be current bidi smokers, compared to students in 7th and 8th grades.



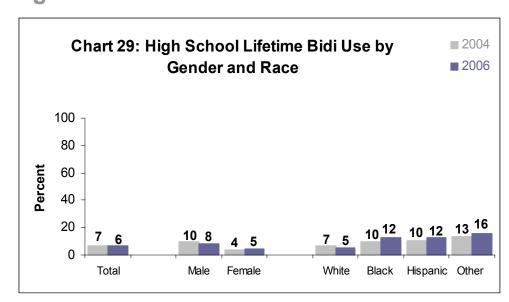
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

# H. Bidis: Lifetime Use 1. High School

Lifetime bidi smoking among high school students decreased from 2004 to 2006 (from 7 percent to 6 percent).

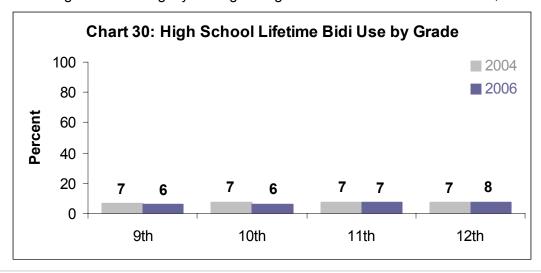
Lifetime bidi smoking decreased among males from 2004 to 2006, from 10 percent to 8 percent.



However, lifetime bidi use increased among females in high school over the two-year time period, from 4 percent to 5 percent.

Lifetime bidi smoking decreased among white high school students from 2004 to 2006 (from 7 percent to 5 percent), while it increased among African Americans (from 10 percent to 12 percent). Hispanic lifetime bidi use also increased from 10 percent to 12 percent over the two-year time period. Students in the Other racial/ethnic group were more likely to be lifetime bidi users in 2006 (16 percent) than in 2004 (13 percent).

Lifetime bidi use among 9th and 10th grades was lower in 2006 than in 2004. Lifetime bidi smoking was unchanged over the two years among 11th grade students. Lifetime bidi smoking increased slightly among 12th grade students from 2004 to 2006, from 7 percent to

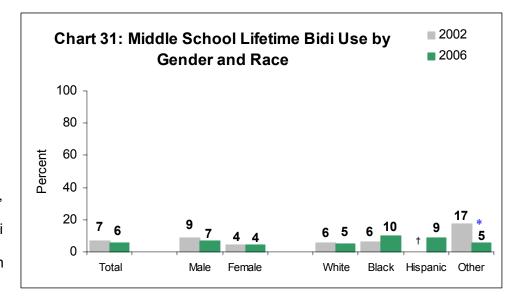


8 percent. In 2006, 9th and 10th grade students were less likely to be lifetime bidi users, compared to 11th and 12th grades.

## H. Bidis: Lifetime Use 2. Middle School

From 2002 to 2006, lifetime bidi smoking among middle school students decreased from 7 percent to 6 percent.

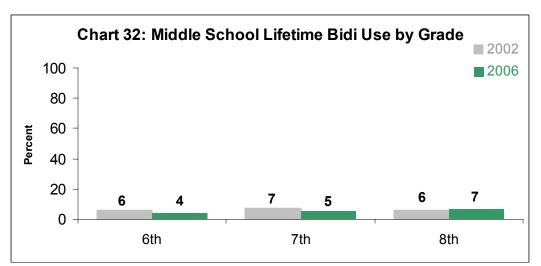
Over the fouryear time period, middle school male lifetime bidi use decreased from 9 percent in 2002 to 7 percent in 2006.



Middle school female lifetime bidi use remained the same however, at 4 percent.

From 2002 to 2006, white middle school student lifetime bidi use decreased from 6 percent to 5 percent. However, middle school African American lifetime bidi use increased from 6 percent to 10 percent. In 2006, Hispanic lifetime bidi use was 9 percent. Lifetime bidi use among American Indian, Alaskan Native, Asian, Native Hawaiian or other Pacific Islander middle school students decreased significantly from 2002 to 2006 (from 17 percent to 5 percent).

Lifetime bidi use was lower among 6th and 7th grade students in 2006 compared to 2002. Eighth grade students were more likely to be lifetime bidi smokers in 2006 than in 2002. In



2006, 6th grade students were less likely to be lifetime bidi users than other students in middle school.

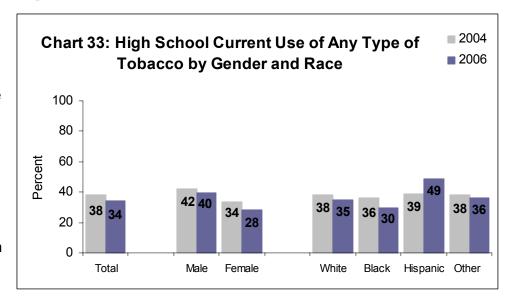
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>†</sup> Insufficient data (sample size is less than 50)

# I. Any Tobacco: Current Use 1. High School

In 2006, 34 percent of high school students were current users of any type of tobacco, compared to 38 percent in 2004.

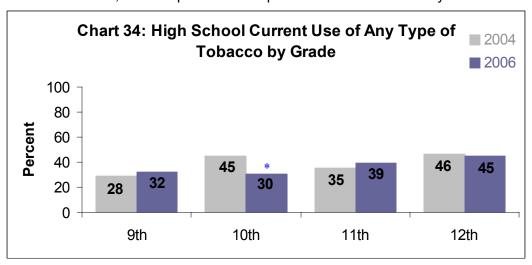
From 2004 to 2006, current use of any type of tobacco among male high school students decreased from 42 percent to 40



percent. Current use of any type of tobacco also decreased among female high school students over this two-year time period.

Current use of any type of tobacco among white high school students decreased from 38 percent to 35 percent from 2004 to 2006. Likewise, African American current use of any tobacco decreased from 36 percent to 30 percent. However, current use of any tobacco among Hispanics increased from 2004 to 2006 (from 39 percent to 49 percent). Current use among Other racial/ethnic high school students decreased from 38 percent to 36 percent.

Over two years, current use of any type of tobacco decreased significantly among 10th grade students, from 45 percent to 30 percent. Current use of any tobacco increased among ninth



and 11th grades. In 2006, 10th grade students were least likely to be current users of any type of tobacco. Current use of any type of tobacco decreased among 12th grade students over the two-year time period.

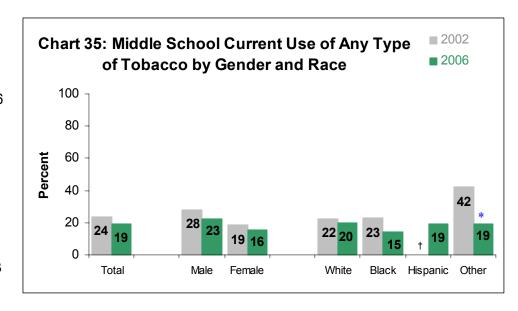
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## I. Any Tobacco: Current Use

#### 2. Middle School

Current use of any type of tobacco among middle school students in 2006 was 19 percent, compared to 24 percent in 2002.

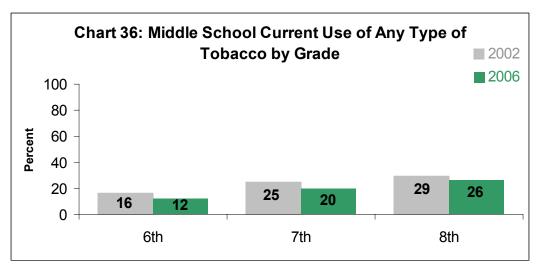
From 2002 to 2006, current use of any tobacco decreased from 28 percent to 23 percent among male middle



school students. Current use of any tobacco decreased from 19 percent to 16 percent among female middle school students.

From 2002 to 2006, current use of any type of tobacco decreased among white and African American middle school students (from 22 percent to 20 percent for whites and from 23 percent to 15 percent for African Americans). In 2006, current use of any tobacco among Hispanics was 19 percent. A statistically significant decrease in current any tobacco use occurred among the Other racial/ethnic group over the four year period (from 42 percent to 19 percent).

Current use of any type of tobacco decreased among all grades in middle school from 2002



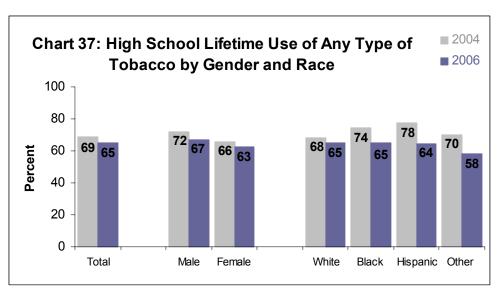
to 2006. In 2006, sixth grade students were less likely to be current users of any tobacco, compared to other middle school grades.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## J. Any Tobacco: Lifetime Use 1. High School

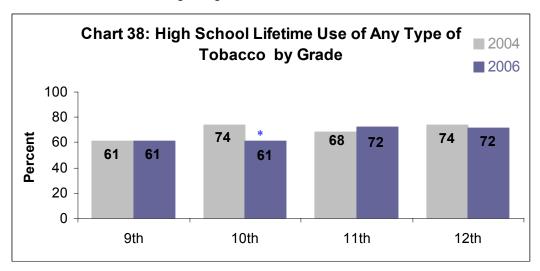
Lifetime use of any type of tobacco decreased from 2004 to 2006 among high school students (from 69 percent to 65 percent).

Lifetime use of any type of tobacco decreased among male and female high school students over the two year time period (72 percent to 67 percent for males and 66 percent to 63 percent to females).



In 2006, 68 percent of white and 74 percent of African American high school students were lifetime users of any type of tobacco, compared to 65 percent for both racial/ethnic groups in 2004. In 2006, Hispanics in high school were less likely to be lifetime users of any type of tobacco than in 2004. Likewise, high school students in the Other racial/ethnic group were less likely to be lifetime tobacco users in 2006 than in 2004.

From 2004 to 2006, lifetime use of any type of tobacco decreased significantly among 10th grade students (from 74 percent to 61 percent). Over this time period, lifetime use of any tobacco decreased among 12th grade students, increased among 11th grade students, and remained the same among 9th grade students.



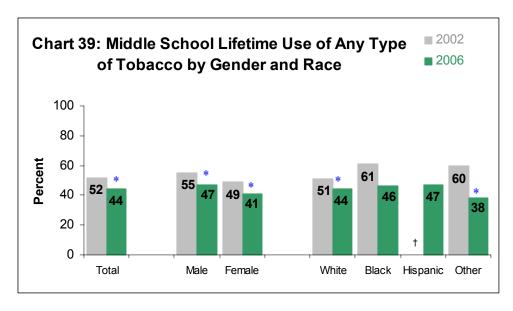
<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## J. Any Tobacco: Lifetime Use

#### 2. Middle School

Lifetime use of any type of tobacco among middle school students decreased significantly from 2002 to 2006 (from 52 percent to 44 percent).

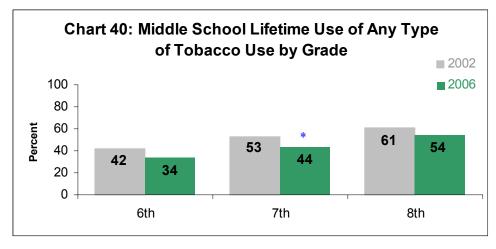
Both male and female lifetime use of any type of tobacco decreased significantly over



this time period. Male use decreased from 55 percent to 47 percent. Female use decreased from 49 percent to 41 percent.

Lifetime use of any tobacco decreased among white, African American, and the racial/ethnic group that includes American Indians, Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders. Lifetime use among both whites and the racial/ethnic group including American Indians, Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders decreased significantly from 2002 to 2006. Lifetime use of any tobacco among Hispanic middle school students was 47 percent in 2006.

Lifetime use of any tobacco decreased significantly among 7th grade students from 2002 to 2006. Students in all middle school grades were less likely to be lifetime users of any tobacco in 2006 compared to 2002.



<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

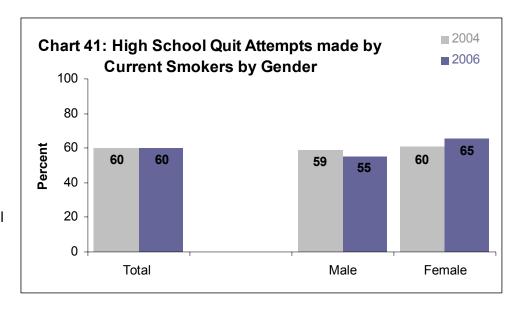
<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

## **II.CESSATION**

## A. High School

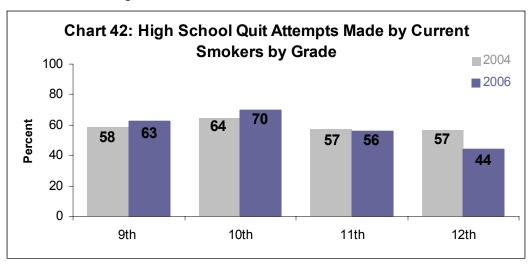
From 2004 to 2006, overall high school quit attempts remained the same (60 percent).

Over these two years, quit attempts among male high school students decreased from 59 percent to 55 percent. Quit attempts in high



school females increased from 60 percent to 65 percent from 2004 to 2006. Race/ethnic categories are not included due to insufficient sample sizes.

Quit attempts among 9th and 10th grade students increased from 2004 to 2006. However, quit attempts among 11th and 12th grade students decreased over these two years. Students in 12th grade in 2006 were less likely to attempt to quit smoking, compared to students in other grades.

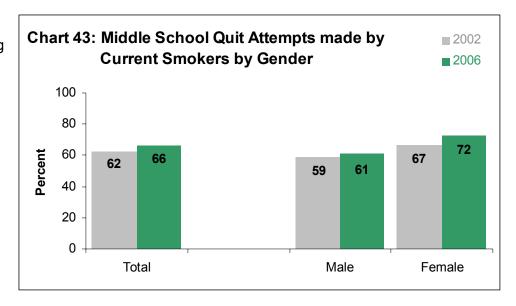


#### **II.CESSATION**

#### B. Middle School

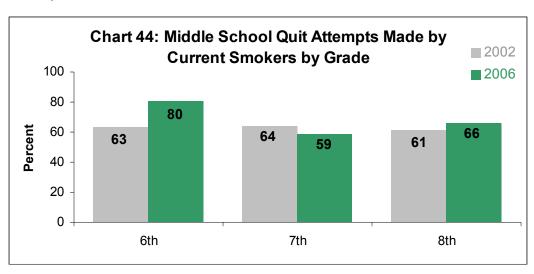
Quit attempts increased among middle school students from 2002 to 2006, from 62 percent to 66 percent.

Over this fouryear time period, quit attempts in middle school males increased from 59 percent to 61 percent. In 2006, quit attempts in



middle school females was 72 percent, compared to 67 percent in 2002. Race/ethnic categories are not included due to insufficient sample sizes.

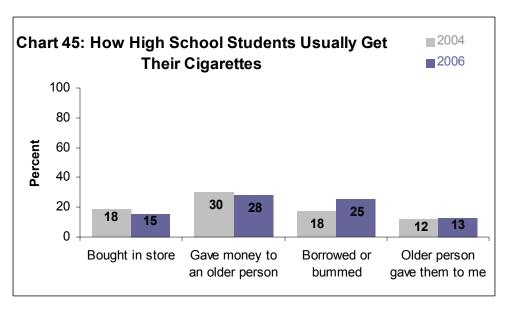
From 2002 to 2006, quit attempts among 6th grade students increased from 63 percent to 80 percent. Over the same time period, quit attempts among 7th grade students decreased from 64 percent to 59 percent. Quit attempts among 8th grade students increased from 61 percent to 66 percent.



#### III. ACCESS TO TOBACCO

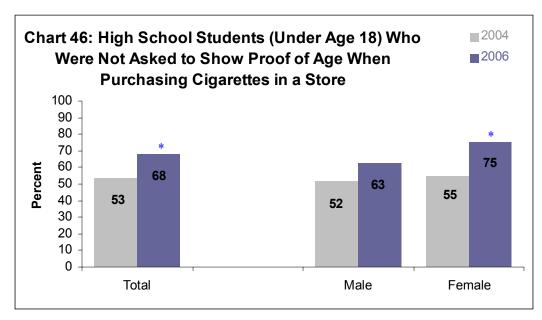
## A. High School

From 2004 to 2006, the percentage of high school current cigarette smokers who usually get their cigarettes by purchasing them in a store decreased from 18 percent to 15 percent. High school students were less likely in 2006 to give money to an older person to purchase their cigarettes for them (28 percent) than in 2004 (30 percent). Twenty-five percent of high school students borrowed or



bummed to get their cigarettes in 2006, compared to 18 percent in 2004. High school students were more likely to get cigarettes from an older person (13 percent) in 2006 than in 2004 (12 percent).

From 2004 to 2006, high school students under the age of 18 who were current smokers and were not asked to show proof of age when purchasing cigarettes in a store increased significantly from 53 percent to 68 percent. The percentage of male current smokers who



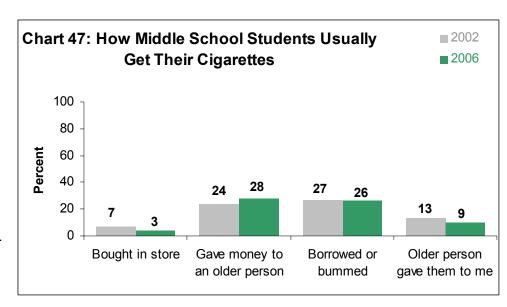
were not asked for proof of age increased from 52 percent to 63 percent. The percentage of female high school current smokers under age 18 who were not asked to show proof of age when purchasing cigarettes increased significantly from 55 percent in 2004 to 75 percent in 2006.

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

#### III. ACCESS TO TOBACCO

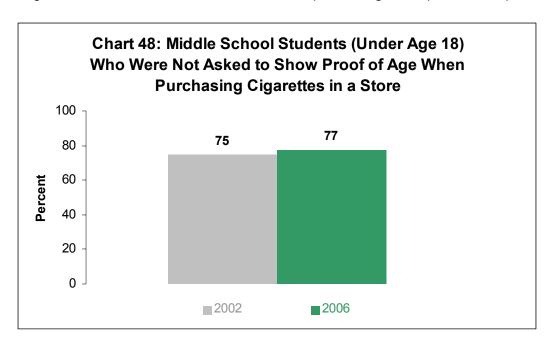
#### B. Middle School

Middle school students who were current smokers in 2006 were less likely to purchase cigarettes in a store when they usually acquired their own (3 percent), compared to 2002 (7 percent). In 2006, middle school students were most likely to usually get



their cigarettes by giving money to an older person to purchase cigarettes for them (28 percent), compared to other methods. Borrowing or bumming cigarettes or getting them from an older person were less popular methods of obtaining cigarettes in 2006, compared to 2002.

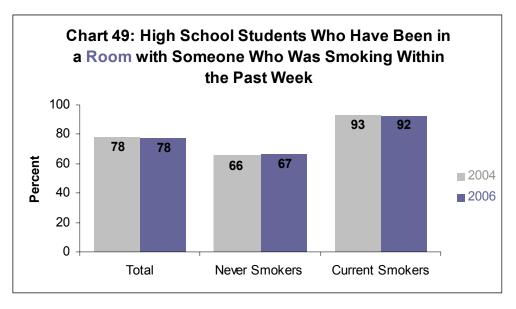
In 2006, 77 percent of middle school students who were current smokers and purchased cigarettes in a store were not asked to show proof of age, compared to 75 percent in 2002.



#### IV. EXPOSURE TO SECONDHAND SMOKE

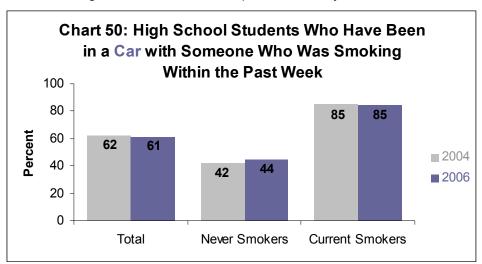
## A. High School

From 2004 to 2006. the percentage of high school students who have been in a room with someone who was smoking within the past week did not change (78 percent). Over two years, high school students who never have smoked who



were in the same room with someone who was smoking on at least one of the past 7 days increased from 66 percent to 67 percent. High school students who are current smokers who were in the same room with someone who was smoking decreased from 93 percent to 92 percent over two years.

From 2004 to 2006, the percentage of high school students who have been in a car with someone who was smoking within the past week decreased from 62 percent to 61 percent. High school students who have never smoked who were riding in a car with someone who was smoking on at least one of the past seven days increased from 2004 to 2006 (from 42).

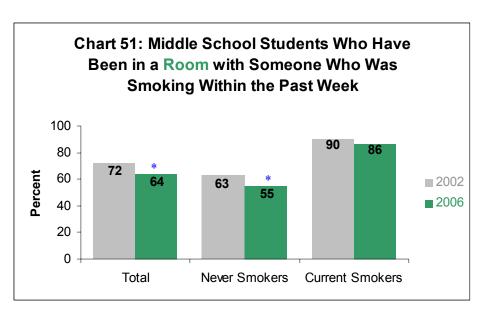


percent to 44
percent). Current
smoking high
school students
who were riding in
a car with
someone smoking
on at least one of
the past seven
days stayed about
the same (85
percent) over this
time period.

#### IV. EXPOSURE TO SECONDHAND SMOKE

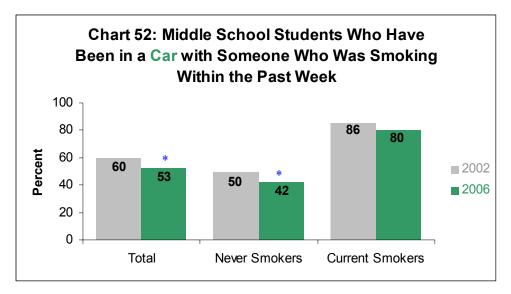
#### B. Middle School

From 2002 to 2006. the percentage of middle school students who have been in a room with someone who was smoking within the past week decreased significantly from 72 percent to 64 percent. Over four years, middle school students who have never smoked who were in the same room with someone



who was smoking cigarettes on at least one of the past seven days decreased significantly from 63 percent to 55 percent. In 2006, 86 percent of current smoking middle school students were in the same room with someone who was smoking on at least one of the past seven days, compared to 90 percent in 2002.

From 2002 to 2006, the percentage of middle school students who have been in a car with someone who was smoking decreased significantly from 60 percent to 53 percent. Middle school students who have never smoked cigarettes were less likely, in 2006, to have been in a car with someone who was smoking within the past week (42 percent), compared to 2002 (50 percent). This was a statistically significant decline. Students who are current smokers



who were riding in a car with someone who was smoking cigarettes at least once in the past seven days also decreased from 2002 to 2006 (from 86 percent to 80 percent).

<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

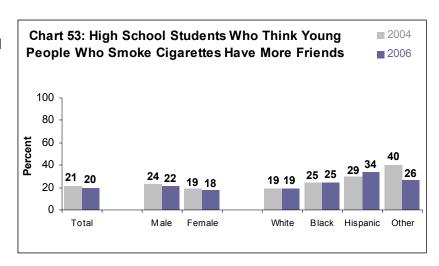
# V.PERCEPTIONS AND ATTITUDES TOWARD TOBACCO USE

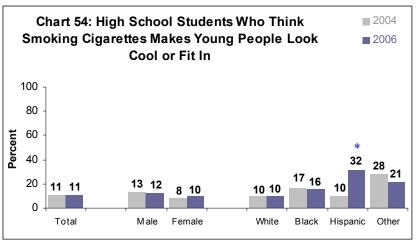
## A. High School

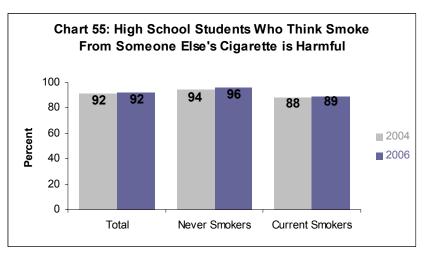
Attitudes and beliefs held by youth, as well as social and environmental influences, predict smoking prevalence. From 2004 to 2006, the percentage of high school students who think young people who smoke cigarettes have more friends decreased from 21 percent to 20 percent. In 2006, males were more likely than females to think young people who smoke have more friends. Also in 2006, compared to the Other racial/ethnic group, Hispanic high school students were most likely to think young people who smoke have more friends.

In 2006, the percentage of high school students who think smoking cigarettes makes young people look cool or fit in was 11 percent (unchanged from 2004). Males were more likely to think smoking made young people look cool or fit in, compared to females, in 2006. Hispanic high school students think smoking makes young people fit in at a significantly higher rate than in 2004 (32 percent, compared to 10 percent).

The percentage of high school students who think smoke from someone else's cigarette is harmful did not change from 2004 to 2006. Among those who have never smoked, the percentage increased from 94 percent to 96 percent. Among current smokers, 89 percent think smoke from someone else's cigarette is harmful, compared to 88 percent in 2004.







<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

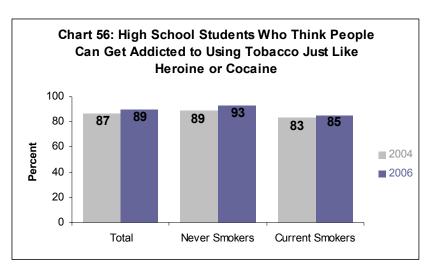
# V. PERCEPTIONS AND ATTITUDES TOWARD TOBACCO USE

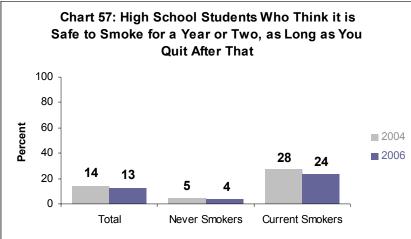
## A. High School

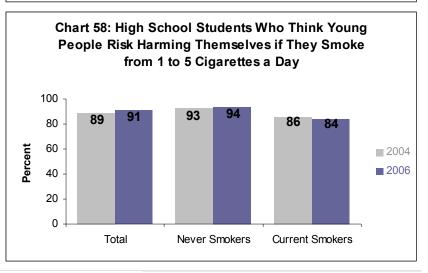
The percentage of high school students who have never smoked that think people can get addicted to using tobacco just like heroine or cocaine increased from 2004 to 2006. Of those who have never smoked, the percentage that think you can get addicted as easily increased over two years. In 2006, the percentage of current smokers in high school who think people can get addicted to using tobacco just like heroine or cocaine was higher than in 2004.

The percentage of high school students who think it is safe to smoke for a year or two, as long as you quit after that, decreased from 2004 to 2006. Never smokers who have who think it is safe to smoke for a year or two decreased from 5 percent to 4 percent from 2004 to 2006. Current smoking high school students who think it is safe decreased from 28 percent in 2004 to 24 percent in 2006.

From 2004 to 2006, the percentage of high school students who think young people risk harming themselves if they smoke from one to five cigarettes a day increased. Never smokers who think young people risk harming themselves also increased from 93 percent in 2004 to 94 percent in 2006. Over this time period, the percentage of current smoking high school students who think young people risk harming themselves decreased from 86 percent in 2004 to 84 percent in 2006.







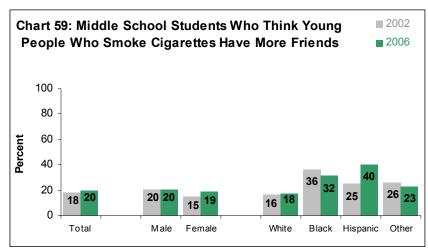
# V. PERCEPTIONS AND ATTITUDES TOWARD TOBACCO USE

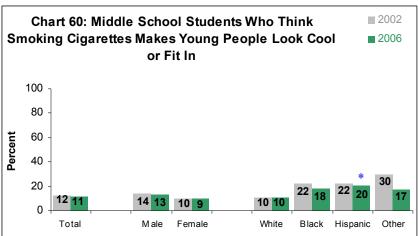
#### **B. Middle School**

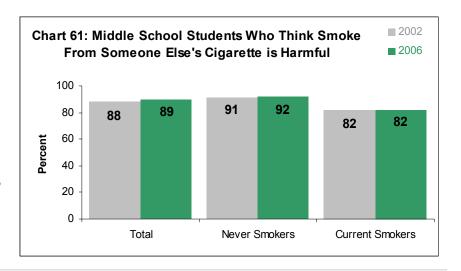
From 2002 to 2006, the percentage of middle school students who think young people who smoke cigarettes have more friends increased, overall, from 18 percent to 20 percent. In 2006, males were more likely than females to think young people who smoke have more friends. Also in 2006, compared to the Other racial/ethnic grouping, Hispanic middle school students were most likely to think young people who smoke have more friends.

In 2006, the percentage of middle school students who think smoking cigarettes makes young people look cool or fit in was 11 percent (down from 2002). Males were more likely to think smoking made young people look cool or fit in, compared to females, in 2006. Students in racial/ethnic groups other than white, black or Hispanic in 2006 were significantly less likely to think smoking makes young people fit in than in 2002 (17 percent, compared to 30 percent).

The percentage of middle school students who think smoke from someone else's cigarette is harmful increased from 2002 to 2006. Among those who have never smoked, the percentage increased from 91 percent to 92 percent. Among current smokers, 82 percent think smoke from someone else's cigarette is harmful (unchanged from 2002).







<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

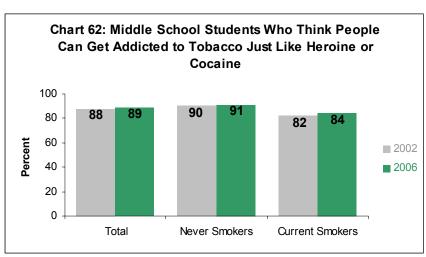
# V.PERCEPTIONS AND ATTITUDES TOWARD TOBACCO USE

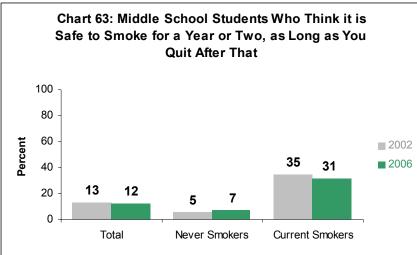
#### B. Middle School

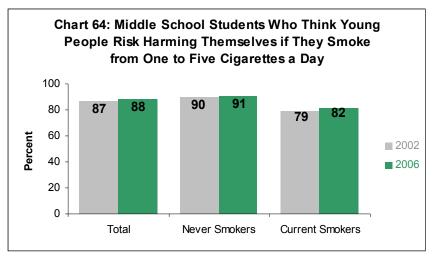
The percentage of middle school students who think people can get addicted to using tobacco just like heroine or cocaine increased from 2002 to 2006. Never smokers who think people can get addicted as easily increased from 90 percent to 91 percent. In 2006, the percentage of current smokers in middle school who think people can get addicted to using tobacco just like heroine or cocaine was 84 percent compared to 82 percent in 2002.

The percentage of middle school students who think it is safe to smoke for a year or two, as long as you quit after that, decreased from 2002 to 2006. Never smokers who think it is safe increased from 5 percent to 7 percent from 2002 to 2006. Current smoking middle school students who think it is safe decreased from 35 percent in 2002 to 31 percent in 2006.

From 2002 to 2006, the percentage of middle school students who think young people risk harming themselves if they smoke from one to five cigarettes a day increased. Never smokers who think young people risk harming themselves increased from 90 percent in 2002 to 91 percent in 2006. Over this time period, the percentage of current smoking middle school students who think young people risk harming themselves increased from 79 percent in 2002 to 82 percent in 2006.

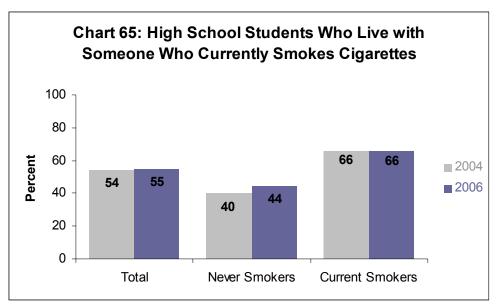






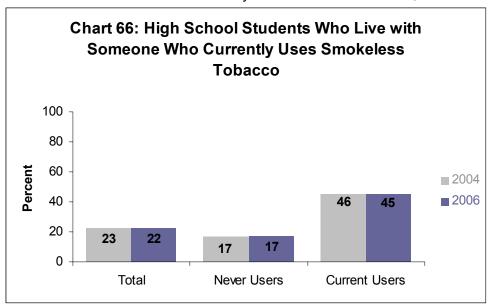
## A. High School

From 2004 to 2006. the percentage of high school students who live with someone who currently smokes cigarettes increased. Never smokers who live with someone who currently smokes cigarettes increased (from 40 percent to 44 percent). The



percentage of high school current smokers who live with someone who currently smokes cigarettes remained the same from 2004 to 2006 (66 percent).

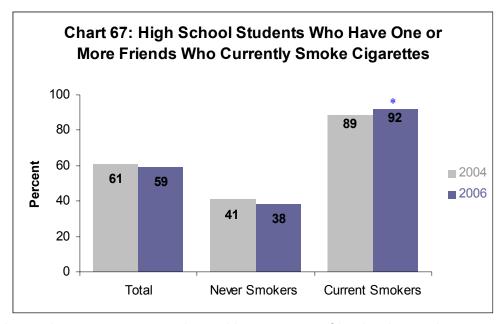
The percentage of high school students who live with someone who uses smokeless tobacco decreased from 23 percent in 2004 to 22 percent in 2006. Never users who live with someone who uses smokeless tobacco remained the same from 2004 to 2006 (17 percent). The percentage of high school students who are current users of smokeless tobacco who live with someone who also currently uses smokeless tobacco, decreased slightly over two



years (from 46 percent to 45 percent).

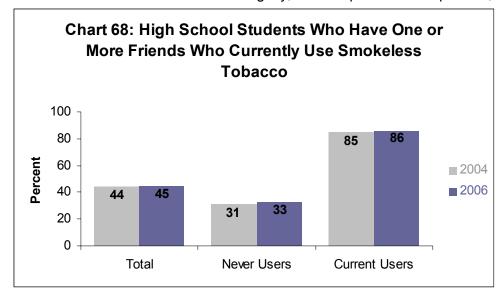
### A. High School

From 2004 to 2006. the percentage of high school students who have one or more friends that currently smoke decreased. Never smokers who have one or more friends who currently smokes cigarettes decreased from 41 percent to 38 percent. In 2006, the percentage



of high school students who were current smokers with one or more friends who smoke cigarettes was 92 percent, compared to 89 percent in 2004 (a statistically significant difference).

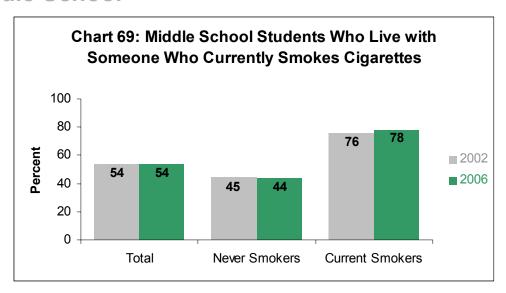
From 2004 to 2006, the percentage of high school students with one or more friends that currently use smokeless tobacco increased. Never smokeless tobacco users with one or more friends that currently use smokeless tobacco increased from 31 percent to 33 percent. The percentage of current smokeless tobacco users with one or more friends who currently use smokeless tobacco increased slightly, from 85 percent to 86 percent, over two years.



<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

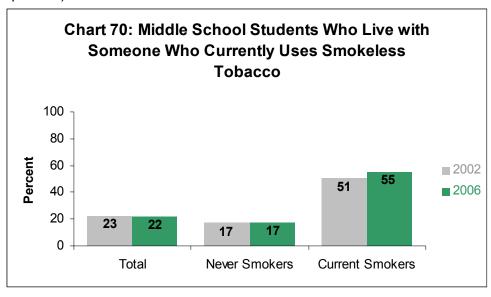
#### B. Middle School

From 2002 to 2006, the percentage of middle school students who live with someone who currently smokes cigarettes remained the same (54 percent). Never smokers who live with someone who currently smokes



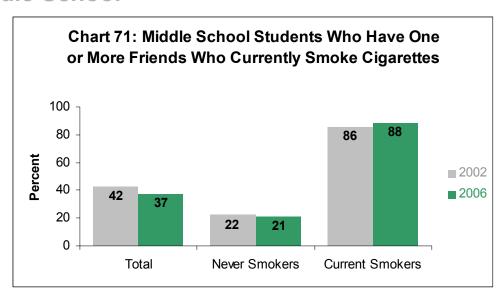
decreased from 45 percent to 44 percent). The percentage of middle school current smokers who live with someone who currently smokes cigarettes increased from 76 percent in 2002 to 78 percent in 2006.

The percentage of middle school students who live with someone who currently uses smokeless tobacco decreased from 23 percent in 2002 to 22 percent in 2006. The percentage of middle school students who have never used smokeless tobacco and live with someone who does remained the same from 2002 to 2006 (17 percent). The percentage of middle school students who are current users of smokeless tobacco who live with someone who also currently uses smokeless tobacco increased over four years (from 51 percent to 55 percent).



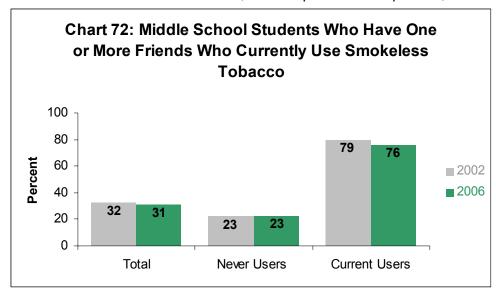
#### B. Middle School

From 2002 to 2006. the percentage of middle school students who have one or more friends that currently smoke decreased from 42 percent in 2002 to 37 percent in 2006. The percentage of middle school students who have never smoked who



have one or more friends who currently smoke cigarettes decreased from 22 percent to 21 percent. In 2006, the percentage of middle school students who were current smokers with one or more friends who smoke cigarettes was 88 percent, compared to 86 percent in 2002.

From 2002 to 2006, the percentage of middle school students who have one or more friends who currently use smokeless tobacco decreased from 32 percent in 2002 to 31 percent in 2006. The percentage of middle school students who have never used smokeless tobacco, but have one or more friends that currently use remained the same (23 percent). The percentage of current smokeless tobacco users with one or more friends who also currently use smokeless tobacco decreased, from 79 percent to 76 percent, over four years.

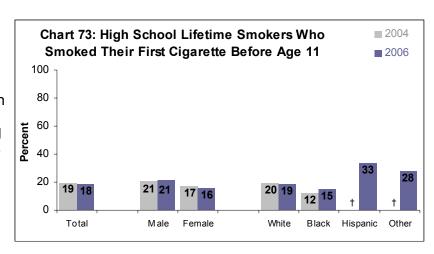


<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

## VII. TOBACCO DEPENDENCE

## A. High School

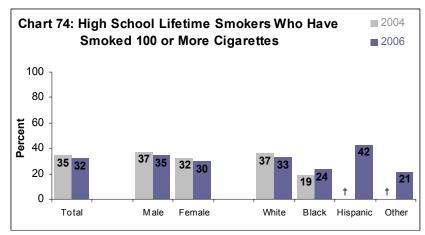
From 2004 to 2006, lifetime smokers in high school who smoked their first cigarette before the age of 11 decreased from 19 percent in 2004 to 18 percent in 2006. In 2006, males were more likely than females to have smoked their first cigarette before age 11. In 2006, Hispanics were more likely than the Other racial/ethnic group to have smoked their first cigarette before age 11.

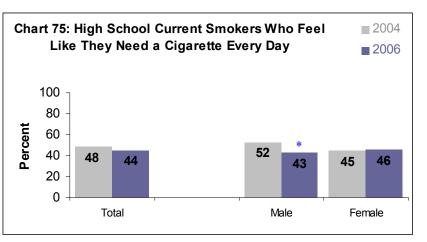


High school lifetime smokers who have smoked 100 or more cigarettes decreased from 2004 to 2006 (from 35 percent to 32 percent). Males were more likely to have smoked 100 or more cigarettes than females in 2006. Hispanic students were more likely than the Other racial/ethnic group to have smoked 100 or more cigarettes in 2006.

High school current smokers who feel like they need a cigarette every day decreased from 2004 to 2006

(from 48 percent to 44 percent). Male current smokers were significantly less likely in 2006 to feel like they need a cigarette every day (43 percent), compared to 2004 (52 percent). Female current smokers who feel like they need a cigarette every day increased slightly from 2004 to 2006 (45 percent, compared to 46 percent).





<sup>\*</sup> Statistically significant difference, p-value < 0.05, Chi Square.

<sup>&</sup>lt;sup>†</sup> Insufficient data (sample size is less than 50)

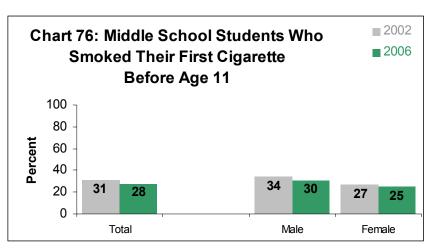
## VII. TOBACCO DEPENDENCE

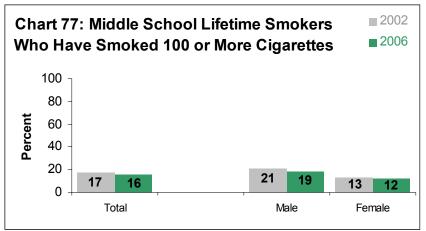
## A. Middle School

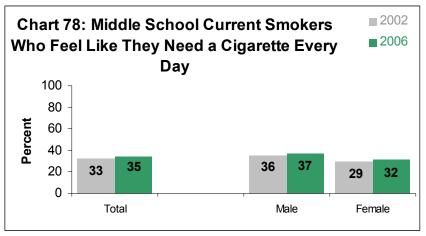
From 2002 to 2006, lifetime smokers in middle school who smoked their first cigarette before the age of 11 decreased from 31 percent in 2002 to 28 percent in 2006. In 2006, males were more likely than females to have smoked their first cigarette before age 11 (30 percent compared to 25 percent).

Middle school lifetime smokers who have smoked 100 or more cigarettes decreased from 2002 to 2006 (from 17 percent to 16 percent). Males were more likely to have smoked 100 or more cigarettes than females in 2006 (19 percent).

Middle school current smokers who feel like they need a cigarette every day increased from 2002 to 2006 (from 33 percent to 35 percent). Male current smokers were more likely in 2006 to feel like they need a cigarette every day (37 percent), compared to 2002 (36 percent). Female current smokers who feel like they need a cigarette every day increased from 2002 to 2006 (32 percent compared to 29 percent).







### VIII. Definitions

**Access to Tobacco:** current cigarette smokers who were under age 18 were asked how they usually obtained cigarettes in the previous 30 days and whether or not they were asked to show proof of age when purchasing cigarettes in a store in the previous 30 days.

**Current bidi smoking:** having smoked at least one bidi on one or more of the past 30 days. Bidis (pronounced "bee-dees") are hand-rolled cigarettes wrapped in a leaf, tied with a string, and imported to the United States primarily from India and other Southeast Asian countries. They are small, thin and can be flavored or unflavored.<sup>2</sup>

**Current cigar smoking:** having smoked at least one cigar, cigarillo, or little cigar on one or more of the past 30 days.

Current cigarette smoking: having smoked at least one cigarette on one or more of the past 30 days.

**Current smokeless tobacco use:** having used smokeless tobacco at least once on one or more of the past 30 days.

**Current use of any tobacco product:** having smoked or used a tobacco product on one or more of the past 30 days.

**Exposure to Secondhand Smoke:** students were asked on how many of the past seven days they were in the same room or riding in a car with someone who was smoking cigarettes.

Lifetime bidi smoking: having ever tried smoking a bidi, even one or two puffs.

**Lifetime cigar smoking:** having ever tried smoking a cigar, cigarillo, or little cigar; even one or two puffs.

Lifetime cigarette smoking: having ever tried smoking a cigarette, even one or two puffs.

Lifetime smokeless tobacco use: having ever used smokeless tobacco, even one or two times. .

**Lifetime use of any type of tobacco:** having ever tried smoking or using a tobacco product, even one or two puffs.

Other Race/Ethnic Group: American Indians, Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders.

**Perceptions and Attitudes Toward Tobacco Use:** students were asked questions to reveal if they think smoking makes others have more friends, fit in or is harmful to themselves or others.

Quit attempts: current smoker attempts to stop smoking at least once in the past 12 months.

**Social Influences Impacting Tobacco Use:** measured by asking students whether or not they live in a home in which someone else who smokes cigarettes or uses smokeless tobacco. Social influences are also measured by asking students whether or not one or more of their closest friends smoke cigarettes or use smokeless tobacco.

**Tobacco Dependence Among Youth:** youth that have smoked at least 100 cigarettes in their lifetime are at risk for becoming established smokers, or people who smoke cigarettes on a daily basis. Having smoking at least 100 cigarettes in a lifetime is also a strong indicator of nicotine addiction.

# A. High School Current Use

Table 1. Current Tobacco Use Among Kentucky High School Students by Gender, Race/Ethnicity, and Grade, 2006											
Category	Cigarette Use		Smokalass		Cigar Hea		Bidi Use		Any Tobacco Use		
	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	
	Gender										
Female	24.9	5.1	3.2	1.2	9.7	2.6	2.0	0.8	28.5	5.2	
Male	24.2	3.4	23.1	4.7	19.7	2.6	4.1	1.1	39.7	4.4	
				Race/E	Ethnicity						
White	25.0	3.0	14.3	2.6	13.8	1.9	3.0	0.7	34.6	3.4	
African American	18.6	10.0	6.4	5.2	21.9	12.0	3.5	2.8	29.6	13.3	
Hispanic	34.9	20.8	8.9	6.1	35.7	14.5	1.2	0.7	48.9	14.4	
Other	26.5	11.6	18.1	9.5	20.2	10.8	12.3	7.6	36.5	12.1	
				Gr	ade						
9th	21.2	4.6	11.9	4.2	14.2	2.0	2.8	1.0	31.9	5.0	
10th	20.7	3.1	13.0	3.0	12.8	3.0	2.0	0.8	30.3	4.7	
11th	31.8	5.9	14.5	4.7	17.4	3.8	3.9	1.6	39.2	6.7	
12th	32.1	6.3	19.6	5.3	17.9	4.7	5.6	2.1	44.9	7.0	
Total	24.5	3.8	13.5	3.2	14.9	1.7	3.1	0.9	34.3	4.3	

# **B.** High School Lifetime Use

Table 2. Lifetime Tobacco Use Among Kentucky High School Students by Gender, Race/Ethnicity, and Grade, 2006										
Category	Cigarette Use		Smokeless Tobacco Use		Cigar Use		Bidi Use		Any Tobacco Use	
	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)
	Gender									
Female	59.0	5.6	16.5	4.0	30.8	6.1	4.6	1.9	62.5	7.0
Male	56.2	4.0	44.2	4.7	46.7	4.3	8.1	1.6	67.1	3.5
	Race/Ethnicity									
White	57.8	3.7	32.3	3.3	37.6	3.7	5.5	1.1	64.8	3.9
African American	54.3	10.3	15.9	9.9	49.4	17.1	12.4	7.4	65.0	13.1
Hispanic	66.6	20.8	28.5	16.0	52.4	18.9	12.4	8.8	64.3	20.7
Other	51.1	16.0	32.7	13.8	41.0	17.2	16.0	8.9	58.0	17.8
				Gr	ade					
9th	55.0	5.2	27.4	4.9	34.8	2.9	5.9	1.6	61.4	6.1
10th	51.5	6.3	30.4	5.1	33.5	6.1	5.8	1.6	61.1	4.9
11th	65.4	6.3	33.8	6.8	49.4	6.7	7.0	2.6	71.9	6.8
12th	65.9	8.1	38.3	6.3	43.8	8.1	7.6	2.3	71.7	8.0
Total	57.5	4.0	30.8	4.6	38.9	4.4	6.4	1.3	64.8	4.4

## C. Middle School Current Use

Table 3. Current Tobacco Use Among Kentucky Middle School Students by Gender, Race/Ethnicity, and Grade, 2006										
Category			Smokeless Tobacco Use		Cigar Use		Bidi Use		Any Tobacco Use	
	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)
				Gei	nder					
Female	11.8	2.1	3.2	0.8	3.8	1.4	2.4	0.6	15.8	2.4
Male	12.3	2.4	12.6	1.9	9.7	2.0	4.1	0.8	22.5	2.8
	Race/Ethnicity									
White	12.7	2.1	8.6	1.4	6.9	1.6	3.1	0.6	20.0	2.3
African American	6.4	2.5	4.9	1.6	7.7	2.3	5.5	1.7	14.6	3.3
Hispanic	16.0	7.1	7.1	3.8	10.7	5.4	4.5	2.5	19.3	7.5
Other	12.4	5.9	5.3	2.7	8.7	4.4	7.4	4.3	19.0	7.8
Grade										
6th	7.9	2.6	5.0	1.5	4.6	1.5	2.3	0.9	11.9	2.6
7th	11.5	2.6	8.3	2.2	5.4	1.7	3.4	1.0	19.7	3.3
8th	16.7	3.0	10.9	2.1	11.0	2.9	4.6	1.2	26.2	4.2
Total	12.1	1.9	8.1	1.3	7.1	1.5	3.5	0.6	19.4	2.2

## D. Middle School Lifetime Use

Table 4. Lifetime Tobacco Use Among Kentucky Middle School Students by Gender, Race/Ethnicity, and Grade, 2006										
Category			Smokeless Tobacco Use		Cigar Use		Bidi Use		Any Tobacco Use	
	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)	%	95% CI (±)
				Ge	nder					
Female	35.4	4.2	9.9	1.7	14.7	2.1	4.3	1.1	40.9	4.0
Male	37.2	4.1	26.2	2.8	25.9	3.0	6.7	1.3	47.3	4.4
	Race/Ethnicity									
White	36.2	3.7	19.1	2.1	20.3	2.2	4.9	8.0	44.0	3.4
African American	36.9	7.0	13.0	2.9	22.6	4.8	10.1	2.9	46.0	8.5
Hispanic	40.0	12.9	13.6	6.0	22.8	10.7	8.8	5.1	46.7	11.7
Other	33.7	7.6	15.1	5.3	15.7	6.6	5.4	2.7	37.9	9.3
	Grade									
6th	25.6	5.1	12.8	2.4	14.2	2.6	4.2	1.2	33.9	4.8
7th	36.6	3.3	16.7	3.1	17.8	2.6	5.4	1.7	44.0	3.6
8th	46.1	4.6	25.1	2.9	29.0	4.3	6.8	1.5	54.1	4.6
Total	36.4	3.6	18.3	1.9	20.5	2.2	5.6	1.0	44.3	3.5

# E. Demographics

Table 5: Kentucky Middle and High School Survey Participants, 2006									
Category	High School Actual Number  High School Weighted Percentage		Middle School Actual Number	Middle School Weighted Percentage					
	Go	ender							
Female	1,550	48.1%	1,853	48.3%					
Male	1,457	51.9%	1,874	51.7%					
	Race/	Ethnicity							
White	2,587	88.7%	3,098	85.9%					
African American	233	9.1%	328	10.7%					
Hispanic	59	0.9%	83	1.4%					
Other	109	1.3%	213	2.0%					
	G	irade							
6th			1,069	31.8%					
7th			1,303	34.0%					
8th			1,346	34.2%					
9th	1,229	35.8%							
10th	881	30.3%							
11th	496	26.5%							
12th	382	7.4%							

### X. TECHNICAL NOTES

#### Sample

A two-stage cluster sample design was used to produce a representative sample of students in Kentucky. The first stage consisted of randomly choosing 90 of the 230 public high schools and 93 of the 228 public middle schools in the state with probability proportional to enrollment size. Of these, 65 high schools and 74 middle schools agreed to participate.

The second stage of the sampling involved randomly choosing classes within the sampled schools. All students from each randomly selected classroom were asked to participate. A total of 3,469 students from high school and 4,392 students from middle school were randomly selected to participate in the KYTS. Of those selected, 3,016 high school students (grades 9-12) and 3,745 middle school students (grades 6-8) completed the survey. The overall response rate was 62.8 percent for high schools and 67.9 percent for middle schools.

#### **Survey Instrument**

The KYTS was given to students in one class period. Those administering the survey protected student privacy by following procedures to assure that student participation was anonymous and voluntary. Students completed a self-administered questionnaire in the classroom and recorded their answers on a response sheet. The core questionnaire contains 67 items, including questions about tobacco use, exposure to secondhand smoke, smoking cessation, school curriculum, minors' ability to purchase or obtain tobacco products, knowledge and attitudes about tobacco, familiarity with protobacco and anti-tobacco media messages, as well as demographic items.

#### Weighting

The high school and middle school samples for the KYTS are representative of all public high school and middle school students in Kentucky. The response rate for both high school and middle school students surveyed was high enough to produce estimates that are representative of the entire high school and middle school populations of the state. The estimates can be used to make inferences concerning tobacco use risk behaviors of public school students in grades 6 through 12 in Kentucky. A weighting factor was applied to each high school and middle school questionnaire to reduce bias by adjusting for non-response and to reflect the likelihood of sampling each student. With weighted data, tests of statistical significance were done on prevalence estimates.

#### Limitations

The results of the KYTS are subject to limitations, including but not restricted to the following: First, the data only represent youth attending public middle and high schools. It does not include all youth in the age group for these two schools, such as those who are home-schooled or attend private schools. Next, the KYTS has not been conducted during the same time of year each year it has been administered. The KYTS was conducted in the spring in 2002, in the fall in 2004, and again in the spring in 2006. This introduces the possibility of variations in results from year to year. For example, the school population is older in the spring than in the fall. Finally, all data are self reported and respondents might not answer honestly about using tobacco, which is a socially undesirable behavior.

#### **REFERENCES**

- 1. Evans, W.D., Hersey, J., Ulasevich, A., Powers, A. (2000). What Youth Think About Smoking: Results from the 1999 National Youth Tobacco Survey.
- 2. Centers for Disease Control and Prevention. Bidi use among urban youth—Massachusetts, March-April 1999. *Morbidity and Mortality Weekly Report* 1999;48(36):796-799.